

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of protecting a foot of a human from effects of a landmine explosion underneath said foot, including

guiding shock waves caused by the landmine explosion obliquely away from said foot by means of a correspondingly obliquely oriented shock wave guide member embedded in a sole volume of an article of footwear worn by the human, the shock wave guide member being of a material having an acoustic speed of at least more than 3000 m/sec;

~~cracking the material of the shock wave guide member by means of said shock waves at a speed of crack progression lower than the acoustic speed of said material of the shock wave guide member, and spalling said material at a downstream end of the shock wave guide member to create a path of lesser resistance for a blast following the shock waves;~~

~~causing said ensuing blast following the shock waves to follow said path of lesser resistance and removing said cracked material to render said path open;~~

deflecting any stray component of the shock waves back into the guide member and attenuating ~~inhibiting~~ propagation of any said stray component of the shock waves in a direction toward said foot in the sole volume of the article of footwear by means of a layer of material having a low acoustic speed arranged between the shock wave guide member and an inner sole of the article of footwear;[[.]]

cracking the material of the shock wave guide member by means of said shock waves at a speed of crack progression lower than the acoustic speed of said material of the shock wave guide member, and spalling said material at a downstream end of the shock wave guide member to create a path of lesser resistance for a blast following the shock waves; and

causing said blast following the shock waves to follow said path of lesser resistance and removing said cracked material to render said path open, in which the acoustic speed of said layer of material having a low acoustic speed is lower than 200 m/sec.

2. (Original) A method as claimed in Claim 1 in which guiding the shock waves is

obliquely laterally outwardly in accordance with an oblique outward orientation of the shock wave guide member.

3. (Currently Amended) A method as claimed in Claim 1 in which the shock wave guide member is selected to have an acoustic speed at least as high as the acoustic speed of glass higher than 3000 m/sec, preferably in the region of 6000 m/sec or more.

4. (Previously presented) A method as claimed in Claim 1 which includes absorbing heat energy by evaporating liquid contained in the sole volume.

5. (Original) A method as claimed in Claim 4 in which the liquid is proximate the guide member.

6. (Currently Amended) A method as claimed in Claim 1, in which said guiding of the shock waves, cracking of the shock wave material and creating a path of lesser resistance take place in composite fashion along a plurality of paths alongside one another by means of a composite shock wave guide member having a plurality of shock wave guide elements alongside one another.

7. (Currently Amended) A method as claimed in Claim 6 in which each shock wave guide element is in the form of a strip of rigid glass containing material, the strips being oriented transversely to allow bending of the article of footwear along transverse bend lines intermediate adjacent strips, the strips being arranged in oblique layers having upstream ends which are located proximate the sole at transversely spaced positions, the layers extending upwardly outwardly towards their downstream ends positioned proximate an outer side of a sole of the article of footwear.

8. (Previously Presented) A method as claimed in Claim 1 in which said layer of material having a low acoustic speed is in the form of vermiculite, or a composite material containing vermiculite.

9. (Currently Amended) A method ~~as claimed in Claim 1 which includes of~~
protecting a foot of a human from effects of a landmine explosion underneath said foot including
guiding shock waves caused by the landmine explosion obliquely away from said foot by
means of a correspondingly obliquely oriented shock wave guide member embedded in a sole
volume of an article of footwear worn by the human, the shock wave guide member being of a
material having an acoustic speed of more than 3000 m/sec;

deflecting any stray component of the shock wave into the guide member and attenuating
propagation of any said stray component of the shock waves in a direction towards said foot in
the sole volume of the article of footwear by means of a layer of material having a low acoustic
speed arranged between the shock wave guide member and an inner sole of the article of
footwear;

cracking the material of the shock wave guide member by means of said shock waves at a
speed of crack progression lower than the acoustic speed of the shock wave guide member, and
spalling said material at a downstream end of the shock wave guide member to create a path of
lesser resistance for a blast following the shock waves; and

causing said blast following the shock waves to follow said path of lesser resistance and
removing said cracked material to render said path open, in which the acoustic speed of said
layer of material having a lower acoustic speed is lower than 200 m/sec; and

enhancing shock wave progression downstream of the foot by means of a layer of soak-out material in close contact with skin along a foot surface opposite a sole of the foot, the layer of material having an acoustic speed at least equal to acoustic speed of flesh.

10. (Original) A method as claimed in Claim 9 in which the acoustic speed of said soak-out material is higher than the acoustic speed of water.

11. (Previously Presented) A method as claimed in Claim 9 which includes containing the layer of soak-out material in association with a sock worn by the human.

12. (Currently Amended) An article of protective footwear for a human having a composite sole including an outer sole along one extremity of the article of footwear, a spaced inner sole for seating a foot of a user, and a sole volume intermediate the outer and the inner soles, the composite sole including in said sole volume

a shock wave guide member oriented to guide shock waves caused by a landmine explosion obliquely away from said foot in use, the shock wave guide member being of a solid material which has an acoustic speed at least higher than 3000 m/sec and which is prone to being cracked by shock waves at a speed of crack progression lower than its acoustic speed; and

a layer of blocking material having a low acoustic speed lower than 200 m/sec between the shock wave guide member and the inner sole[.]], said solid material of the shock wave guide member, for example glass or a material containing glass or a ceramic material, is prone to being cracked and pulverized by shock waves at a speed of crack progression lower than its acoustic speed such that the pulverized material of the shock wave guide member is spalled at a downstream end of the shock wave guide member and displaced to create a path of lesser resistance for an ensuing blast.

13. (Original) An article of footwear as claimed in Claim 12 in which the shock wave guide member extends from a laterally inner position proximate the outer sole obliquely upwardly to a laterally outward extremity of the composite sole.

14. (Currently Amended) An article of footwear as claimed in Claim 12 in which the shock wave guide member ~~is of solid material having an acoustic speed at least as high as the acoustic speed of glass~~ has an acoustic speed higher than 3000 m/sec, preferably in the region of 6000 m/sec or more.

15. (Previously Presented) An article of footwear as claimed in Claim 14 in which the shock wave guide member comprises a material selected from glass and a ceramic material.

16. (Previously Presented) An article of footwear as claimed in Claim 12 in which the composite sole volume contains a liquid proximate the shock wave guide member.

17. (Previously Presented) An article of footwear as claimed in Claim 12 in which the shock wave guide member is of composite structure comprising a plurality of shock wave guide elements extending alongside one another.

18. (Currently Amended) An article of footwear as claimed in Claim 17 in which each shock wave guide element is in the form of a strip of rigid material selected from glass or glass containing material, or a ceramic material, the strips being oriented transversely and arranged adjacent one another to allow bending of the article of footwear along transverse bend lines intermediate adjacent strips, the strips being arranged in oblique layers having upstream ends which are located proximate the sole at transversely spaced positions, the layers extending upwardly outwardly towards their downstream ends positioned proximate an outer side of a sole of the article of footwear.

19. (Previously Presented) An article of footwear as claimed in Claim 12 in which the blocking material is vermiculite, or a composite material containing vermiculite.

20. (Currently Amended) An article of protective footwear for a human having a composite sole including an outer sole along one extremity of the article of footwear, a spaced inner sole for seating a foot of a user, and a sole volume intermediate the outer and inner soles, the composite sole including in said sole volume;

a shock wave guide member oriented to guide shock waves caused by a landmine explosion obliquely away from said foot in use, the shock wave guide member being of a solid material which has an acoustic speed at least higher than 3000 m/sec;

a layer of blocking material having a low acoustic speed lower than 200 m/sec between the shock wave guide member and the inner sole, said solid material of the shock wave guide member, for example glass or a material containing glass or a ceramic material, is prone to being cracked and pulverized by shock waves at a speed of crack progression lower than its acoustic speed such that the pulverized material of the shock wave guide member is spalled at a downstream end of the shock wave guide member and displaced to create a path of lesser

resistance for an ensuing blast; and

~~footwear as claimed in Claim 12 which includes~~ a foot surrounding upper defining a foot cavity above the inner sole, and a layer of soak-out material in fluid form and having an acoustic speed equal to or higher than the acoustic speed of flesh and arranged to be in close contact with skin at a surface of the foot opposite a sole of the foot in use.

21. (Original) An article of footwear as claimed in Claim 20 in which the soak-out material has an acoustic speed higher than that of water.

22. (Original) An article of footwear as claimed in Claim 21 in which the soak-out material is or includes glycerin.

23. (Previously Presented) An article of footwear as claimed in Claim 20 in which the soak-out material is contained in a closed, flexible container such as a pad or sachet.

24. (Previously Presented) An article of footwear as claimed in Claim 20 in which the soak-out material is provided in amongst granular or filamentary material having an acoustic speed higher than the acoustic speed of the soak-out material.

25. (Previously Presented) The combination of an article of footwear as claimed in Claim 20 and a sock, in which the soak-out material is contained in the sock.

26. (New) A method of protecting a foot of a human from effects of a landmine explosion underneath said foot, including
guiding shock waves caused by the landmine explosion obliquely away from said foot by means of a correspondingly obliquely oriented shock wave guide member embedded in a sole volume of an article of footwear worn by a human; and
enhancing shock wave progression downstream of the foot by means of a layer of soak-out material in close contact with skin on a foot surface opposite a sole of the foot, the layer of material having an acoustic speed at least equal to acoustic speed of flesh.

27. (New) An article of protective footwear for a human having a composite sole including an outer sole along one extremity of the article of footwear and a spaced inner sole for seating a foot of a user, and a sole volume intermediate the outer and inner soles, the composite sole including in said volume a shock wave guide member oriented to guide shock waves caused by a landmine explosion obliquely away from said foot in use; and

a foot surrounding upper defining a foot cavity above the inner sole and a layer of soak-out material in fluid form and having an acoustic speed equal to or higher than the acoustic speed of flesh and arranged to be in close contact with the skin at a surface of the foot opposite a sole of the foot in use.